

REMARKS***Status of the Claims***

Claims 1 -32 are all the claims pending in the application. By the present Amendment, Applicant amends claims 1, 26, 27 and 30 and cancels claims 2 and 12.

In the Office Action dated November 12, 2003, the Examiner has rejected claims 1-3, 5, 6, 11, 15, 16, 18, 20, 22, and 26 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,208,473 to Omura. Claims 7, 8, 10, 12-14, 17, 19, 21, and 23-25 are indicated as being allowable over the art of record. Furthermore, claims 27-32 are objected to as containing an unclarity, but are otherwise allowable.

Preliminary Matters

As a first preliminary matter, the Applicant notes that the Examiner has not included an initialed copy of the Form PTO SB/08 filed with the Information Disclosure Statement filed on October 23, 2003. The Examiner is requested to remedy this oversight with the next Office communication. While one of the references disclosed is independently listed on the Examiner's Notice of References Cited (Form PTO-892), other references listed on the Form PTO SB/08 must still be indicated as having been considered.

Second, Applicant strongly disagrees with the Examiner's comment that the amendments from the previous amendment "necessitated the new ground(s) of rejection." The only substantive amendment made to claim 1 in the previous Amendment was an incorporation therein of the subject matter of claim 4. Therefore, the Examiner should have cited the Omura patent against claim 4 in the previous Office Action. Instead, the Omura patent was newly cited by the Examiner in the Office Action of November 12, 2003. For this reason, the Applicant respectfully requests removal of the finality of the present Action.

Third, the Applicant notes with disappointment the Examiner's comment on page 9 of the Office Action that the two additional patents cited "show catadioptric projection lenses comprising structural limitations of that of the claimed invention." Such a statement makes the prosecution history unclear whether the rejected claims would be patentable or not over these references even when the primary reference is overcome.

In order to clarify the prosecution history record, Applicant notes that US 6,512,641 B2 discloses catadioptric projection lenses having a geometric beam splitter instead of a physical beam splitter (as in the invention) in the projection lens. Quite different design requirements apply to this different type of beam splitting. Whereas projection lenses according to the invention (with physical beam splitter) have an object field centered around the optical axis (on-axis system), systems having geometric splitters necessarily have an object field lying outside the optical axis (off-axis systems). This requires quite different means for correcting aberrations. To any skilled artisan, systems with geometric beam splitter are one possible type, whereas systems with physical beam splitter are a distinctly different type, each with specific, differing advantages and drawbacks. Normally, design measures appropriate for one type cannot be simply transferred to the other type.

US 5,694,241 (Ishiyama et al.) shows a system having a physical beam splitter and an intermediate image. Embodiments of the invention are constructed to image the object plane on the image plane without intermediate image. Also, in the prior art system, a negative lens is disposed immediately in front of the concave mirror. As mentioned above, this is a typical conventional measure for correcting chromatic aberrations. According to the invention, there is no lens between the beam splitter and the concave mirror.

Response to Objections and Rejections

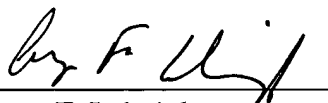
Claims 27 and 30 are amended in a fashion analogous to amendments made to claim 1 in the Applicant's prior Amendment. Accordingly, the grounds of objection of these two claims should be hereby overcome.

In addition, the Applicant is amending claims 1 and 26, in order to incorporate the limitations of dependent claim 2 and presently allowable dependent claim 12. This renders the current grounds of rejection moot and claims 1 and 26, as amended, as well the claims dependent thereon, should be allowable.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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